

IN THE CLAIMS:

Claims 10 and 13 were previously cancelled. Claims 9, 11, and 12 have been amended herein. All of the pending claims are presented below. This listing of claims will replace all prior versions and listings of claims in the application. Please enter these claims as amended.

Listing of Claims:

1. (Previously presented) A semiconductor device having at least one memory cell having a capacitor cell formed of multiple layers of glass, said capacitor cell having a side wall surface, comprising:

at least one layer of boro-phospho silicate glass;

at least one layer of germanium boro-phospho silicate glass having at least a portion thereof

contacting at least a portion of said at least one layer of boro-phospho silicate glass;

at least one layer of dielectric material covering at least the side wall surface of said capacitor cell; and

at least one electrode layer deposited over at least a portion of the at least one layer of dielectric material.

2. (Previously presented) A semiconductor device having at least one memory cell having a capacitor cell formed of multiple layers of glass, said capacitor cell having a side wall surface, comprising:

a plurality of layers of boro-phospho silicate glass;

a plurality of layers of germanium boro-phospho silicate glass, at least a portion of at least one layer of said plurality of layers of germanium boro-phospho silicate glass contacting at least a portion of at least one layer of said plurality of layers of boro-phospho silicate glass;

at least one layer of dielectric material covering at least the side wall surface of said capacitor cell; and

at least one electrode layer deposited over at least a portion of the at least one layer of dielectric material.

3. (Previously presented) A semiconductor device having at least one memory cell having a capacitor cell formed of multiple layers of glass, said capacitor cell having a side wall surface, comprising:

a plurality of layers of boro-phospho silicate glass; and

a plurality of layers of germanium boro-phospho silicate glass, each layer of said plurality of layers of germanium boro-phospho silicate glass having at least a portion thereof contacting at least a portion of at least one layer of said plurality of layers of boro-phospho silicate glass.

4. (Previously presented) A semiconductor memory device having at least one memory cell having a capacitor cell formed of multiple layers of glass, said capacitor cell having a side wall surface, comprising:

at least one layer of boro-phospho silicate glass; and

at least one layer of germanium boro-phospho silicate glass having at least a portion thereof contacting at least a portion of said at least one layer of boro-phospho silicate glass.

5. (Previously presented) A semiconductor memory device having at least one memory cell having a capacitor cell formed of multiple layers of glass, said capacitor cell having a side wall surface, comprising:
a plurality of layers of boro-phospho silicate glass; and
a plurality of layers of germanium boro-phospho silicate glass, at least a portion of at least one layer of said plurality of layers of germanium boro-phospho silicate glass contacting at least a portion of at least one layer of said plurality of layers of boro-phospho silicate glass;
at least one layer of dielectric material covering at least the side wall surface of said capacitor cell; and
at least one electrode layer deposited over at least a portion of the at least one layer of dielectric material.

6. (Previously presented) A semiconductor memory device having at least one memory cell having a capacitor cell formed of multiple layers of glass, said capacitor cell having a side wall surface, comprising:
a plurality of layers of boro-phospho silicate glass; and
a plurality of layers of germanium boro-phospho silicate glass, each layer of said plurality of layers of germanium boro-phospho silicate glass having at least a portion thereof contacting at least a portion of at least one layer of said plurality of layers of boro-phospho silicate glass;
at least one layer of dielectric material covering at least the side wall surface of said capacitor cell; and
at least one electrode layer deposited over at least a portion of the at least one layer of dielectric material.

7. (Previously presented) A semiconductor memory device having at least one memory cell having a capacitor cell formed of multiple layers of glass, said capacitor cell having a side wall surface, comprising:
at least one capacitor cell having a portion thereof formed by at least one layer of boro-phospho silicate glass and at least one layer of germanium boro-phospho silicate glass having at least a portion thereof contacting at least a portion of said at least one layer of boro-phospho silicate glass;
at least one layer of dielectric material covering at least the side wall surface of said capacitor cell; and
at least one electrode layer deposited over at least a portion of the at least one layer of dielectric material.

8. (Previously presented) A semiconductor memory device having at least one memory cell having a capacitor cell formed of multiple layers of glass, said capacitor cell having a side wall surface, comprising:
at least one capacitor cell having a portion thereof formed by a plurality of layers of boro-phospho silicate glass and a plurality of layers of germanium boro-phospho silicate glass, at least a portion of at least one layer of said plurality of layers of germanium boro-phospho silicate glass contacting at least a portion of at least one layer of said plurality of layers of boro-phospho silicate glass;
at least one layer of dielectric material covering at least the side wall surface of said capacitor cell; and
at least one electrode layer deposited over at least a portion of the at least one layer of dielectric material.

9. (Currently amended) A semiconductor memory device having at least one memory cell having a capacitor cell formed of multiple layers of glass, said capacitor cell having a side wall surface, comprising:
at least one capacitor cell having a portion thereof formed by a plurality of layers of boro-phospho silicate glass and a plurality of layers of germanium boro-phospho silicate glass, each layer of germanium boro-phospho silicate glass of said plurality having at least a portion thereof contacting at least a portion of at least one layer of said plurality of layers of boro-phospho silicate glass;
at least one layer of dielectric material covering at least the side wall surface of said capacitor cell; and
at least one electrode layer deposited over at least a portion of the at least one layer of dielectric material.

10. (Cancelled)

11. (Currently amended) The semiconductor memory device of claim 9, wherein said at least one ~~dielectric~~-layer of dielectric material comprises one of Si₃N₄, Ta₂O₅, or BST.

12. (Currently amended) The semiconductor memory device of claim 9, ~~wherein said~~ further including a conductive layer-comprises-comprising Si-Ge.

13. (Cancelled)